l7_int_3 (TMVGuFR-Cox6BAKYTrL4vDg9A4ZGExdWbHJk)

October 27, 2020

Let $k1\_group\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_int\_3 : \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Let $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_xcmplx\_0 : \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $v1\_int\_1 : \iota \Rightarrow o$ be given. Let $k22\_binop\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v4\_vectsp\_1 : \iota \Rightarrow o$ be given. Let $l4\_algstr\_0 : \iota \Rightarrow o$ be given. Let $k5\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k6\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $g6\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5\_membered : \iota \Rightarrow o$ be given. Let $v36\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l6\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l2\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l5\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l4\_struct\_0 : \iota \Rightarrow o$ be given. Let $l2\_struct\_0 : \iota \Rightarrow o$ be given. Let $l3\_struct\_0 : \iota \Rightarrow o$ be given. Let $l3\_algstr\_0 : \iota \Rightarrow o$ be given. Let $k46\_binop\_2 : \iota$ be given. Let $k4\_numbers : \iota$ be given. Let $k44\_binop\_2 : \iota$ be given. Let $k1\_funct\_7 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_group\_1 : \iota \Rightarrow o$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $v3\_membered : \iota \Rightarrow o$ be given. Let $v1\_membered : \iota \Rightarrow o$ be given. Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $v4\_membered : \iota \Rightarrow o$ be given. Let $u1\_algstr\_0 : \iota \Rightarrow \iota$ be given. Let $u2\_algstr\_0 : \iota \Rightarrow \iota$ be given. Let $u3\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $u2\_struct\_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (k3\_xcmplx\_0\ np\_\_1\ X0 = X0) \tag{1}$$

Assume the following.

$$\begin{array}{c}((v2\_xxreal\_0\ np\_\_1) \wedge (m2\_subset\_1\ np\_\_1\ k1\_numbers\ k5\_numbers)) \wedge \\ ((m1\_subset\_1\ np\_\_1\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_1\ k1\_numbers))\end{array} \tag{2}$$

Assume the following.

$$k4\_xcmplx\_0\ (k4\_xcmplx\_0\ np\_\_1) = np\_\_1 \tag{3}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{4}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_int\_1\ X0)\wedge(v1\_int\_1\ X1))\Rightarrow(k22\_binop\_2\ X0\ X1 = k3\_xcmplx\_0\ X0\ X1) \tag{6}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0)\Rightarrow(k4\_xcmplx\_0\ (k4\_xcmplx\_0\ X0) = X0) \tag{7}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v4\_vectsp\_1\ X0)\wedge(l4\_algstr\_0\ X0)))\Rightarrow(k1\_group\_1\ X0 = k5\_struct\_0\ X0) \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((m1\_subset\_1\ X0\ (u1\_struct\_0\ k1\_int\_3))\wedge((m1\_subset\_1\ X1\ (u1\_struct\_0\ k1\_int\_3))\wedge((v1\_int\_1\ X2)\wedge(v1\_int\_1\ X3))))\Rightarrow(((X0 = X2)\wedge(X1 = X3))\Rightarrow(k6\_algstr\_0\ k1\_int\_3\ X0\ X1 = k22\_binop\_2\ X2\ X3)) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.(((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ (k2\_zfmisc\_1\ X0\ X0)\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0)\ X0)))))\wedge(((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ (k2\_zfmisc\_1\ X0\ X0)\ X0)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0)\ X0)))))\wedge((m1\_subset\_1\ X3\ X0)\wedge(m1\_subset\_1\ X4\ X0))))\Rightarrow(\forall X5.\forall X6.\forall X7.\forall X8.\forall X9.(g6\_algstr\_0\ X0\ X1\ X2\ X3\ X4 = g6\_algstr\_0\ X5\ X6\ X7\ X8\ X9)\Rightarrow((X0 = X5)\wedge((X1 = X6)\wedge((X2 = X7)\wedge((X3 = X8)\wedge(X4 = X9)))))) \tag{10}$$

Assume the following.

$$v4\_vectsp\_1\ k1\_int\_3 \tag{11}$$

Assume the following.

$$\forall X0.(v1\_int\_1\ X0)\Rightarrow((v1\_xcmplx\_0\ (k4\_xcmplx\_0\ X0))\wedge(v1\_int\_1\ (k4\_xcmplx\_0\ X0))) \tag{12}$$

Assume the following.

$$v5\_membered\ (u1\_struct\_0\ k1\_int\_3) \tag{13}$$

Assume the following.

$$(\neg v2\_struct\_0\ k1\_int\_3)\wedge(v36\_algstr\_0\ k1\_int\_3) \tag{14}$$

Assume the following.

$$\forall X0.(l6\_algstr\_0\ X0)\Rightarrow((l2\_algstr\_0\ X0)\wedge(l5\_algstr\_0\ X0)) \tag{15}$$

Assume the following.

$$\forall X0.(l5\_algstr\_0\ X0)\Rightarrow((l4\_algstr\_0\ X0)\wedge(l4\_struct\_0\ X0)) \tag{16}$$

Assume the following.

$$\forall X0.(l4\_struct\_0\ X0)\Rightarrow((l2\_struct\_0\ X0)\wedge(l3\_struct\_0\ X0)) \tag{17}$$

Assume the following.

$$\forall X0.(l4\_algstr\_0\ X0)\Rightarrow((l3\_struct\_0\ X0)\wedge(l3\_algstr\_0\ X0)) \tag{18}$$

Assume the following.

$$\forall X0.(l3\_struct\_0\ X0)\Rightarrow(m1\_subset\_1\ (k5\_struct\_0\ X0)\ (u1\_struct\_0\ X0)) \tag{19}$$

Assume the following.

$$(v1\_funct\_1\ k46\_binop\_2)\wedge((v1\_funct\_2\ k46\_binop\_2\ (k2\_zfmisc\_1\ k4\_numbers\ k4\_numbers)\ k4\_numbers)\wedge(m1\_subset\_1\ k46\_binop\_2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ k4\_numbers\ k4\_numbers)\ k4\_numbers)))) \tag{20}$$

Assume the following.

$$(v1\_funct\_1\ k44\_binop\_2)\wedge((v1\_funct\_2\ k44\_binop\_2\ (k2\_zfmisc\_1\ k4\_numbers\ k4\_numbers)\ k4\_numbers)\wedge(m1\_subset\_1\ k44\_binop\_2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ k4\_numbers\ k4\_numbers)\ k4\_numbers)))) \tag{21}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_int\_1\ X0)\wedge(v1\_int\_1\ X1))\Rightarrow(m1\_subset\_1\ (k22\_binop\_2\ X0\ X1)\ k4\_numbers) \tag{22}$$

Assume the following.

$$l6\_algstr\_0\ k1\_int\_3 \tag{23}$$

Assume the following.

$$\forall X0.(l3\_algstr\_0\ X0)\Rightarrow(m1\_subset\_1\ (k1\_group\_1\ X0)\ (u1\_struct\_0\ X0)) \tag{24}$$

Assume the following.

$$\forall X0.\forall X1.m1\_subset\_1\ (k1\_funct\_7\ X0\ X1)\ X1 \tag{25}$$

Assume the following.

$$\forall X0.(l3\_algstr\_0\ X0)\Rightarrow((v1\_group\_1\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow((X1 = k1\_group\_1\ X0)\Leftrightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))\Rightarrow((k6\_algstr\_0\ X0\ X2\ X1 = X2)\wedge(k6\_algstr\_0\ X0\ X1\ X2 = X2))))))) \tag{26}$$

Assume the following.

$$k1\_int\_3 = g6\_algstr\_0\ k4\_numbers\ k44\_binop\_2\ k46\_binop\_2\ (k1\_funct\_7\ np\_\_1\ k4\_numbers)\ (k1\_funct\_7\ k6\_numbers\ k4\_numbers) \tag{27}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_int\_1\ X0)\wedge(v1\_int\_1\ X1))\Rightarrow(k22\_binop\_2\ X0\ X1 = k22\_binop\_2\ X1\ X0) \tag{28}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1)\Rightarrow(v7\_ordinal1\ X0) \tag{29}$$

Assume the following.

$$\forall X0.(l4\_algstr\_0\ X0)\Rightarrow(((\neg v2\_struct\_0\ X0)\wedge(v4\_vectsp\_1\ X0))\Rightarrow((\neg v2\_struct\_0\ X0)\wedge(v1\_group\_1\ X0))) \tag{30}$$

Assume the following.

$$\forall X0.(v3\_membered\ X0)\Rightarrow(v1\_membered\ X0) \tag{31}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(v1\_xcmplx\_0\ X0) \tag{32}$$

Assume the following.

$$\forall X0.(v4\_membered\ X0)\Rightarrow(v3\_membered\ X0) \tag{33}$$

Assume the following.

$$\forall X0.(v5\_membered\ X0)\Rightarrow(v4\_membered\ X0) \tag{34}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(v1\_int\_1\ X0) \tag{35}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers) \Rightarrow (v1\_xreal\_0\ X0) \tag{36}$$

Assume the following.

$$\forall X0.(v5\_membered\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ X0) \Rightarrow (v1\_int\_1\ X1)) \tag{37}$$

Assume the following.

$$\forall X0.(v1\_membered\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ X0) \Rightarrow (v1\_xcmplx\_0\ X1)) \tag{38}$$

Assume the following.

$$\forall X0.(l6\_algstr\_0\ X0) \Rightarrow ((v36\_algstr\_0\ X0) \Rightarrow (X0 = g6\_algstr\_0\ (u1\_struct\_0\ X0)\ (u1\_algstr\_0\ X0)\ (u2\_algstr\_0\ X0)\ (u3\_struct\_0\ X0)\ (u2\_struct\_0\ X0))) \tag{39}$$

Theorem 1 $k1\_group\_1\ k1\_int\_3 = np\_\_1$.